

**REMARKS**

Applicants thank the Examiner for the detailed Office Action dated 21 December 2006. Applicants respectfully request reconsideration of the present application in view of the reasons that follow.

Claims 1-39 were pending in the application. Claims 1, 35, and 39 are currently being amended. Thus, claims 1-39 are now pending in this application.

For simplicity and clarity purposes in responding to the Office Action, Applicants' remarks are primarily focused on the rejections applied to the independent claims (*i.e.*, claims 1, 15, 27, 31, and 39) as outlined in the Office Action with the understanding that the dependent claims are patentable for at least the same reasons (and in most cases other reasons) that the independent claims are patentable. Applicants expressly reserve the right to argue the patentability of the dependent claims separately in any future proceedings.

**Claim Objections**

On page 2 of the Office Action, the Examiner noted that the dependency of claim 35 may be incorrect. Applicants have amended claim 35 to make it dependent from claim 34. Applicants thank the Examiner for bringing this issue to Applicants' attention.

**Claim Rejections – 35 U.S.C. § 102****Independent Claims 1 and 39**

On pages 2-3 of the Office Action, independent claims 1 and 39 and various dependent claims were rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,222,974 to Kensey et al. Independent claim 1 was also rejected under 35 U.S.C. § 102(b) as

being unpatentable over U.S. Patent No. 5,662,681 to Nash et al. Applicants respectfully traverse the rejection. Neither reference identically discloses the subject matter recited in independent claims 1 and 39.

Independent claim 1, as amended, recites a “tissue puncture closure device” including, among other elements, a “filament,” an “anchor,” a “sealing plug,” and an “automatic driving mechanism for automatically tamping the sealing plug toward the second end utilizing force generated by withdrawal of the closure device from the internal tissue wall puncture,” which is not identically disclosed in either reference. Both references explain that the tamping is done manually by the user. Kensey et al., col. 10, lines 42-57 and Nash et al., col. 7, lines 44-57. Both references explain, using almost identical language, that after the anchor and collagen plug have been deployed, the tamping member is then manually slid down the filament by the user’s hand so that it enters the puncture tract and engages the proximal end of the plug member. A few gentle compactions are adequate to achieve the desired result of assisting the plug to conform to the artery. Furthermore, neither the torsion spring 142 from Kensey et al. nor the locking member 36 from Nash et al. use the force generated by withdrawal of the closure device to tamp the sealing plug.

Independent claim 39, as amended, recites a “method of sealing a tissue puncture in an internal tissue wall” including, among other elements, “providing a tissue puncture closure device,” “inserting the tissue puncture closure device into the percutaneous incision,” “deploying the anchor into the tissue puncture,” “withdrawing the closure device from the percutaneous incision,” and “automatically tamping the sealing plug toward the anchor end utilizing force generated by withdrawal of the closure device from the internal tissue wall puncture,” which is

not identically shown in Kensey et al. As explained in the previous paragraph, the torsion spring 142 of Kensey et al. does not use force generated by withdrawal of the closure device to tamp the sealing plug.

For the above reasons, Applicants respectfully submit that independent claims 1 and 39 and the claims which are dependent thereon are not anticipated by the cited reference and are patentable.

***Independent Claim 31***

On page 3 of the Office Action, independent claim 31 and various dependent claims were rejected under 35 U.S.C. § 102(b) as being unpatentable over Nash et al. Applicants respectfully traverse the rejection. Nash et al. does not identically disclose the subject matter recited in independent claim 31.

Independent claim 31, as amended, recites a “method of sealing a tissue puncture in an internal tissue wall” including, among other elements, “automatically transducing a motive force generated by withdrawal of the closure device in a first direction to a tamping force in a second direction,” which is not identically disclosed in Nash et al. As explained above, Nash et al. explains that the tamping is done manually by the user. Furthermore, there is nothing shown in Nash et al. that transduces a motive force generated by withdrawal of the closure device to a tamping force.

In the Office Action, the Examiner relies on a passage from Nash et al. explaining that retraction of the introducer and the instrument brings the tamping member out of the free end of the instrument. See Nash et al., col. 6, lines 52-55 (explaining that the tag 110 is crimped to the filament so that it engages the proximal end of the tamping member to hold that member in place

as the instrument is retracted). However, the tamping member does not impart a tamping force while it is being deployed, which necessarily means that the instrument of Nash does not transduce a motive force generated by withdrawal of the closure device to a tamping force. Nash makes it clear that a "tamping force" is not imparted by the tamping member until after withdrawal of the instrument and even then the tamping is done manually by the user. Nash et al., col., 7, lines 44-57. In fact, Nash et al. explains that after withdrawing the instrument, the tamping member must be inserted back into the puncture tract in order to tamp the plug 30. Id. Therefore, the tamping member could not have been imparting a tamping force since the tamping member is just loose on the filament while the instrument is being withdrawn.

For the above reasons, Applicants respectfully submit that independent claim 31 and the claims which are dependent thereon are not anticipated by the cited reference and are patentable.

### **Double Patenting**

#### ***Claims 1-39***

On page 5 of the Office Action, all of the claims were rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over copending U.S. Application Nos. 11/130,895, 11/130,688, 11/103,730, 11/103,257, and 11/103,196. Applicants respectfully traverse the rejection.

Applicants initially note that with the exception of 11/103,196 ("the '196 Application") none of the applications referred to by the Examiner contain allowed claims. Since the claims may change, Applicants will wait to address any potential double patenting issues until Applicants receive an indication that the claims in these applications or the present application have been allowed.

With regard to the '196 Application, Applicants have enclosed a terminal disclaimer to remove the double patenting rejection. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Respectfully submitted,

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